testing is to make sure the system will meet or exceed its busy hour load capacity objectives under all operating conditions. This requires stressing the system in incremental steps until it breaks and understanding what happens when the system is operating under its full rated transaction load? Beyond its load? Does it slow down? How? Does it fail? Where? How is service restored after an outage? Is service restoration graceful or must the system reboot? Is restart manual or will the system reset itself? Individual load tests may be performed to understand the impact of load on specific system bottlenecks. Most significant architectural problems will come to light under load testing. It is critical that any load placed on a computer telephony system be dynamic, and mimic the load characteristics the system will experience under real-world usage and conditions. See also DYNAMIC LOAD TESTING and LOAD SERVICE CURVES.

**Loaded Line** A telephone line equipped with loading coils to add inductance in order to minimize amplitude distortion. See LOADING and LOADING COIL.

**Loading** A method of improving the voice quality of a phone line. Telephone companies put load coils on local lines. What this loading does is to insert inductance in a local loop circuit to offset the effect of capacitance in the cable. Loading "tunes" the circuit to the voice frequency band (500 to 2500 Hz) and thus improves the quality at the expense of overall bandwidth. You usually have to ask that the loading coils be removed if you're planning to transmit high-speed data exclusively on that circuit. See LOADING COIL.

**Loading Coil** An induction device employed in local loops exceeding 18,000 feet in length, that compensates for wire capacitance and boosts voice grade frequencies. Loading coils are often removed for higher speed data services, as distortion will occur at frequencies higher than those used for voice. See LOADING.

**Loading High** A memory management verb for loading a device driver or TSR (Terminate and Stay Resident) program into upper memory, out of conventional memory. Under DOS, the loading high commands are DEVICEHIGH for device drivers and LOADHIGH (or LH) for TSRs. Third party memory managers use their own routines to load high, though they can sometimes borrow DOS commands.

**Loadware** A Rolm term for software that can be downloaded directly to the Rolm 9751 CBX high-density circuit cards.

**LOC** An ATM term. Loss of Cell Delineation: A condition at the receiver or a maintenance signal transmitted in the PHY overhead indicating that the receiving equipment has lost cell delineation. Used to monitor the performance of the PHY layer.

**Local** Pertaining to a system or device that resides within a subject device's switching domain.

**Local Access and Transport Area** LATA. The MFJ (Modified Final Judgement), which broke up the Bell System, also defined 196 distinct geographical areas known as LATAs. The LATA boundaries generally were drawn in consideration of SMSAs (Standard Metropolitan Statistical Areas), which were defined by the Census Bureau to identify "communities of interest" in economic terms. Generally speaking, the LATA boundaries also were coterminous with state lines and existing area code boundaries, and generally included the territory served by only a single RBOC. The basic purpose of the LATA concept was to delineate the serving areas reserved for LEC (Local Exchange Carrier) activity. In other words, IntraLATA traffic (i.e., local and local long distance) became

the sole right and responsibility of the LECs. InterLATA traffic, on the other hand, became the sole right and responsibility of the IXCs. Over time, a number of state PUCs allowed the IXCs to compete for IntraLATA long distance; they also allowed CAPs (Competitive Access Providers) to provided limited local service in competition with the LECs. The Telecommunications Act of 1996 (The Act) opened the floodgates for competition with the LATA boundaries. The Act also allows the RBOCs to provide InterLATA service outside the states in which they provide local service. Additionally, The Act contains provisions for the RBOCs to offer InterLATA service within the state in which they provide local service, once they have satisfied a 14-point checklist, the most significant conditions of which relate to significant, demonstrated levels of competition within their respective local exchange serving areas. California is divided into 10 LATAs. Sparsely populated states such as South Dakota comprise only a single LATA.

**Local Airtime Detail** This cellular telephone carrier option (which means it costs money) provides a line-itemized, detailed billing of all calls, including call attempts and incoming calls to the mobile. What you get for free is generally a non-detailed, total summary of all calls.

**Local Area And Transport Area** See LATA.

**Local Area Data Transport** LADT. A service of your local phone company which provides you, the user, with synchronous data communications.

**Local Area Network** LAN. A short distance data communications network (typically within a building or campus) used to link computers and peripheral devices (such as printers, CD-ROMs, modems) under some form of standard control. Older data communications networks used dumb terminals (devices with no computing power) to talk to distant computers. But the economics of computing changed with the invention of the personal computer which had "intelligence" and which was cheap. LANs were invented as an afterthought — after PCs — and were originally designed to let cheap PCs share peripherals — like laser printers — which were too expensive to dedicate to individual PCs. And as time went on, what LANs were used for got broader and broader. Today, LANs have four main advantages: 1. Anyone on the LAN can use any of the peripheral devices connected to the LAN. 2. Anyone on the LAN can access databases and programs running on client servers (super powerful PCs) attached to the LAN; and 3. Anyone on the LAN can send messages to and work jointly with others on the LAN. 4. While a LAN does not use common carrier circuits, it may have gateways and/or bridges to public telecommunications networks. See LAN MANAGER, TOKEN RING and ETHERNET.

**Local Area Signaling Services** LASS is a group of central office features provided now by virtually all central office switch makers that uses existing customer lines to provide some extra features to the end user (typically a business user). They are based on delivery of calling party number via the local signaling network. LASS can be implemented on a standalone single central office basis for intra office calls or on a multiple central office grouping in a LATA (what the local phone companies are allowed to serve) for interoffice calls. Local CCS7 (Common Channel Signaling Seven) is required for all configurations. The following features typically make up LASS:

Automatic Callback: Lets the customer automatically call the last incoming call directory number associated with the customer's phone when both phones become idle. This feature gives the customer the ability to camp-on to a line.